

1 **Listing of the Claims**

2 **In the Claims:**

3 The claims have not been amended and are presented here for the convenience of the  
4 Examiner as follows:

5 1. (Previously Presented) A method for recording a live presentation including a predefined  
6 content portion that includes a plurality of presentation slides displayed in response to slide triggering  
7 events during the live presentation, and a live portion with live audio and/or visual content performed  
8 in conjunction with display of said plurality of presentation slides during the live presentation, the  
9 method comprising the steps of:

10 (a) generating slide display commands corresponding to said slide triggering  
11 events captured in real time during the presentation when presented live, for controlling display of  
12 said plurality of presentation slides during playback of a recorded presentation;

13 (b) automatically embedding the slide display commands into a data stream as the  
14 data stream is produced, the data stream comprising data corresponding to the live portion of the  
15 presentation, wherein the live content is captured as a plurality of video frames comprising a plurality  
16 of keyframes and deltaframes;

17 (c) automatically time indexing the plurality of keyframes and deltaframes as the  
18 live content is captured to enable synchronization of the slide display commands with the live  
19 content; and

20 (d) saving the data stream with embedded slide display commands to a file such  
21 that when the file is played, said live portion is reproduced and said plurality of presentation slides  
22 are displayed in substantial synchrony with said live portion as it is played, thereby replicating the  
23 live presentation.

24 2. (Previously Presented) The method of Claim 1, wherein the live portion is captured as it is  
25 performed during the live presentation, further comprising the step of encoding the live portion into a  
26 digital streaming format, thereby producing the data stream.

27 3. (Previously Presented) The method of Claim 2, wherein the step of automatically  
28 embedding the slide display commands comprises the step of interleaving the slide display  
29 commands into the data stream as the slide display commands are generated.

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1           4. (Original) The method of Claim 2, wherein the live presentation is performed using a local  
2 computer that generates the slide display commands in response to the slide triggering events; and  
3 wherein the live portion of the live presentation is captured and encoded into the data stream using an  
4 encoding computer linked in communication with the local computer, further comprising the steps of:

5               (a)     communicating the slide display commands from the local computer to the  
6 encoding computer; and

7               (b)     interleaving the slide display commands into the data stream as they are  
8 received by the encoding computer.

9           5. (Previously Canceled)

10          6. (Previously Presented) The method of Claim 1, wherein the step of automatically time  
11 indexing the plurality of keyframes and deltaframes comprises the steps of:

12               (a)     adding a plurality of time index values to the data stream;

13               (b)     indexing each of said plurality of keyframes to a corresponding time index  
14 value based on the time stamp of the keyframe; and

15               (c)     indexing each slide display command to a nearest preceding keyframe time  
16 index value based on a time stamp of the slide display command.

17          7. (Original) The method of Claim 1, wherein the step generating slide display commands  
18 comprises the steps of:

19               (a)     capturing the slide triggering events as they occur during the live presentation;  
20 and

21               (b)     generating slide display commands based on the slide triggering events that are  
22 captured.

23          8. (Original) The method of Claim 1, wherein each presentation slide is associated with a  
24 slide file that is saved to a predetermined location, and at least one of the slide display commands  
25 references the predetermined location of an associated slide file.

26          9. (Previously Presented) A method for reproducing on a viewing computer a presentation  
27 that was previously presented live, said viewing computer having a display, said presentation  
28 including a predefined content portion with a plurality of presentation slides that were displayed in  
29 response to slide triggering events during the presentation when it was presented live, and a live  
30 portion comprising live audio and/or visual content performed in conjunction with display of said

1 plurality of presentation slides during the presentation when it was presented live, the method  
2 comprising the steps of:

3 (a) producing a recording of the presentation when it was presented live by  
4 performing the steps of:

5 (i) producing a data stream comprising data corresponding to the live  
6 portion of the presentation, wherein the live portion of the presentation is captured as a plurality of  
7 video frames comprising a plurality of keyframes and deltaframes;

8 (ii) generating slide display commands corresponding to said slide  
9 triggering events captured in real time during the presentation when presented live, each slide display  
10 command controlling display of an associated presentation slide when the recording is played;

11 (iii) automatically including the slide display commands with the data  
12 corresponding to the live portion of the presentation in the data stream as the data stream is being  
13 produced, said slide display commands being automatically time indexed in regard to the keyframes  
14 and deltaframes within the data stream based upon the time when the slide triggering events occurred  
15 in the presentation when presented live; and

16 (iv) saving the data stream to a data stream file that is accessible by the  
17 viewing computer;

18 (b) saving the predefined content portion to at least one presentation slide file that  
19 is accessible by the viewing computer;

20 (c) accessing the data stream file with the viewing computer;

21 (d) reproducing the live portion of the presentation on the display of the viewing  
22 computer by playing the data stream file;

23 (e) extracting the slide display commands from the data stream as the slide display  
24 commands are encountered while playing the data stream file;

25 (f) in response to each slide display command that is extracted in the preceding  
26 step, accessing data corresponding to its associated presentation slide with the viewing computer; and

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1 (g) reproducing each of the plurality of presentation slides on the display of the  
2 viewing computer as data corresponding to that presentation slide is accessed by the viewing  
3 computer in the preceding step, so that when the presentation is reproduced, the associated  
4 presentation slide is displayed at substantially an identical time relative to when displayed during the  
5 live portion of the presentation when presented live.

6 10. (Original) The method of Claim 9, wherein the viewing computer accesses the data  
7 corresponding to the presentation slides with a browser program.

8 11. (Original) The method of Claim 10, wherein each of said plurality of presentation slides  
9 is associated with a corresponding HTML slide file that is saved to a predetermined location on a  
10 network accessible by the viewing computer and at least a portion of said slide display commands  
11 comprise a link to the predetermined location of an associated HTML slide file on the network, each  
12 of said HTML slide files being opened in the browser program in response to its associated slide  
13 display command, said browser program interpreting the HTML slide files to reproduce said plurality  
14 of presentation slides.

15 12. (Original) The method of Claim 11, wherein the link to each HTML slide files comprises  
16 an absolute reference to a location on the network at which the HTML slide file corresponding to the  
17 link is stored.

18 13. (Original) The method of Claim 12, wherein each of the absolute references comprises a  
19 base portion identifying a base directory on a network resource in or below which the HTML slide  
20 files are stored, and a relative portion, identifying a location at which the HTML slide files are stored  
21 relative to the base directory, further comprising the steps of:

22 (a) passing the base portion to the browser program to indicate a location of the  
23 base directory;

24 (b) removing the base portion from each of the links in said slide display  
25 commands so as leave only the relative portion of the link; and

26 (c) using the relative portion of each link to enable the browser program to access  
27 the HTML file associated with that link.

28 14. (Original) The method of Claim 10, wherein the browser program includes a display area  
29 having a primary frame, and a secondary frame, a media player screen appearing in the secondary  
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1 frame, said presentation slide files being reproduced in the primary frame, and said live visual content  
2 being reproduced in the media player screen.

3 15. (Original) The method of Claim 14, further comprising the steps of:

4 (a) indicating a location at which the data stream file is stored to the viewing  
5 computer;

6 (b) directing the data stream to the secondary frame; and

7 (c) playing the data stream in the secondary frame after at least a portion of the  
8 data stream file is received, to reproduce the live portion of the presentation.

9 16. (Previously Presented) A system for recording a live presentation including a predefined  
10 content portion having a plurality of presentation slides that are displayed in response to slide  
11 triggering events during the live presentation, and a live portion with live audio and/or visual content  
12 performed in conjunction with display of said plurality of presentation slides during the live  
13 presentation, the system comprising:

14 (a) a local computer having a memory in which a plurality of machine instructions  
15 are stored, a user interface, and a processor coupled to the memory for executing the machine  
16 instructions;

17 (b) a presentation application program comprising a portion of the plurality of  
18 machine instructions stored in the memory of the local computer, the presentation application  
19 program enabling:

20 (i) a presenter to change slides during the live presentation in response to  
21 slide triggering events entered through the user interface; and

22 (ii) slide display commands to be generated in response to the slide  
23 triggering events;

24 (c) an audio capture subsystem that produces a digital audio signal corresponding  
25 to the live audio content; and

26 (d) an encoding application module comprising a portion of the plurality of  
27 machine instructions stored in the memory of the local computer, said encoding application module  
28 being used for:

29 (i) encoding the digital audio signal into a data stream having a streaming  
30 data format;

1 (ii) automatically including the slide display commands with the digital  
2 audio signal in the data stream as the digital audio signal is encoded into the data stream, said data  
3 stream being automatically time indexed to enable synchronization of the slide display commands  
4 with the digital audio signal; and

5 (iii) saving the data stream to a data stream file such that when the data  
6 stream file is played, said audio content is reproduced, and said plurality of presentation slides are  
7 displayed in substantial synchrony with said audio content as it is reproduced, thereby replicating the  
8 live presentation and a timing with which the presentation slides were displayed during the live  
9 presentation in connection with the live audio content.

10 17. (Original) The system of Claim 16, wherein the live portion of the live presentation  
11 further comprises live visual content, further including a video capture subsystem that produces a  
12 digital video signal corresponding the live visual content, whereby the digital video signal is encoded  
13 along with the digital audio signal into the data stream, such that the audio and visual content is  
14 reproduced in synchrony when the data stream file is played.

15 18. (Original) The system of Claim 17, wherein the live visual content is captured as a  
16 plurality of video frames, each being encoded into the data stream with a corresponding time stamp,  
17 and the slide display commands are interleaved into the data stream, such that each slide display  
18 command has a relative time stamp based on its location in the data stream.

19 19. (Original) The system of Claim 18, wherein the plurality of video frames comprises a  
20 plurality of keyframes and deltaframes, and the encoding module further performs the functions of:

21 (a) adding a plurality of time index values to the data stream;  
22 (b) indexing each of said plurality of keyframes to a corresponding time index  
23 value, based on a timestamp of the keyframe; and

24 (c) indexing each slide display command to a nearest preceding keyframe time  
25 index value, based on a time stamp of the slide display command.

26 20. (Previously Presented) A system for recording a live presentation including a predefined  
27 content portion having a plurality of presentation slides that are displayed in response to slide  
28 triggering events during the live presentation, and a live portion comprising live audio content  
29 performed in conjunction with display of said plurality of presentation slides during the live  
30 presentation, the system comprising:

1 (a) a local computer having a memory in which a plurality of machine instructions are  
2 stored, a user interface, and a processor coupled to the memory for executing the machine instructions;

3 (b) an audio capture subsystem that produces a digital audio signal corresponding  
4 to the live audio content;

5 (c) an encoding computer having a memory in which a plurality of machine  
6 instructions are stored, and a processor coupled to the memory for executing the machine  
7 instructions, the encoding computer being linked in communication with the local computer and the  
8 audio capture subsystem;

9 (d) a portion of the plurality of machine instructions stored in the memory of the  
10 encoding computer comprising an encoding module, execution of the encoding module performing  
11 the functions of:

12 (i) encoding the digital audio signal into a data stream having a streaming  
13 data format, said data stream being automatically time indexed to enable synchronization of the slide  
14 display commands with the digital audio signal; and

15 (ii) saving the data stream to a data stream file; and

16 (e) a presentation application program comprising a portion of the plurality of  
17 machine instructions stored in the memory of the local computer, execution of the presentation  
18 application program enabling:

19 (i) a presenter to change slides during the live presentation by entering  
20 slide triggering events through the user interface;

21 (ii) slide display commands to be generated in response to the slide  
22 triggering events; and

23 (iii) communication of the slide display commands to the encoding  
24 computer, said slide display commands being automatically included in the data stream with the  
25 encoded digital audio signal by the encoding module as the slide display commands are received by  
26 the encoding computer and as the digital audio signal is encoded into the data stream, such that when  
27 the data stream file is played, so that said audio content is reproduced and said plurality of  
28 presentation slides are displayed in substantial synchrony with said audio content as it is reproduced,  
29 thereby replicating the live presentation and the timing of the presentation slides being displayed in  
30 connection with the audio content.

1           21. (Original) The system of Claim 20, wherein the live portion of the live presentation  
2 further comprises live visual content, further including a video capture subsystem that produces a  
3 digital video signal corresponding to the live visual content, said digital video signal being encoded  
4 into the data stream by the encoding module executing on the encoding computer, such that the audio  
5 content and visual content are reproduced in synchrony when the data stream file is played.

6           22. (Previously Presented) The system of Claim 21, wherein the live visual content is  
7 captured as a plurality of video frames, each being encoded into the data stream with a corresponding  
8 time stamp, and wherein the slide display commands are interleaved into the data stream, such that  
9 each slide display command has a relative time stamp based on its location in the data stream.

10           23. (Original) The system of Claim 22, wherein the plurality of video frames comprises a  
11 plurality of keyframes and deltaframes, and the encoding module further performs the functions of:

- 12                   (a) adding a plurality of time index values to the data stream;  
13                   (b) indexing each of said plurality of keyframes to a corresponding time index  
14 value, based on a time stamp of the keyframe; and  
15                   (c) indexing each slide display command to a nearest preceding keyframe time  
16 index value, based on a time stamp of the slide display command.

17           24. (Previously Presented) A computer-readable medium having computer-executable  
18 instructions for recording a live presentation having a predefined content portion that includes a  
19 plurality of presentation slides displayed on a computer in response to slide triggering events during  
20 the live presentation, and a live portion comprising live audio and/or visual content performed in  
21 conjunction with display of said plurality of presentation slides during the live presentation,  
22 execution of the computer-executable instructions causing a computer to:

23                   (a) generate slide display commands corresponding to said slide triggering events  
24 captured in real time during the presentation when presented live, for controlling display of said  
25 plurality of presentation slides during playback of a recorded presentation;

26                   (b) automatically embed the slide display commands into a data stream as the data  
27 stream is produced, the data stream comprising data corresponding to the live portion of the  
28 presentation automatically indexed with timing to ensure that the slide display commands are  
29 synchronized with the audio and/or visual content as performed in the live presentation; and

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1 (c) save the data stream with embedded slide display commands to a file, such that  
2 when the file is played, said live portion is reproduced and such that said plurality of presentation  
3 slides are displayed in substantial synchrony with said live portion, thereby replicating the live  
4 presentation and display of said plurality of presentation slides.

5 25. (Previously Presented) The computer-readable medium of Claim 24, wherein execution  
6 of the computer-executable instructions further cause the live portion to be captured as it is performed  
7 during the live presentation and to be encoded into a digital streaming format.

8 26. (Previously Presented) The computer-readable medium of Claim 25, wherein the slide  
9 display commands are interleaved into the data stream as the slide display commands are generated.

10 27. (Previously Presented) The computer-readable medium of Claim 25, wherein the live  
11 visual content is captured as a plurality of video frames, each being encoded into the data stream with  
12 a corresponding time stamp, and the slide display commands are interleaved into the data stream such  
13 that each slide display command has a relative time stamp based on its location in the data stream.

14 28. (Previously Presented) The computer-readable medium of Claim 25, wherein the  
15 plurality of video frames comprises a plurality of keyframes and deltaframes, execution of the  
16 computer-executable instructions causing a computer to:

17 (a) add a plurality of time index values to the data stream;

18 (b) index each of said plurality of keyframes to a corresponding time index value,  
19 based on a timestamp of the keyframe; and

20 (c) index each slide display command to a nearest preceding keyframe time index  
21 value, based on a time stamp of the slide display command.

22 29. (Previously Presented) The computer-readable medium of Claim 24, wherein:

23 (a) the slide triggering events are captured as they occur during the live  
24 presentation;

25 (b) the slide display commands are generated based on the slide triggering events that are  
26 captured.